

FFFFFFF	000000000	RRRRRRRRRRR	RRRRRRRRRRR	TTTTTTTTTTTTT	LLL
FFFFF	000000000	RRRRRRRRRRR	RRRRRRRRRRR	TTTTTTTTTTTTT	LLL
FFFFF	000000000	RRRRRRRRRRR	RRRRRRRRRRR	TTTTTTTTTTTTT	LLL
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000	000	RRR	RRR	TTT
FFF	000000000	RRR	RRR	RRR	LLLLLLLLLLLL
FFF	000000000	RRR	RRR	RRR	LLLLLLLLLLLL
FFF	000000000	RRR	RRR	RRR	LLLLLLLLLLLL

FILE ID**FORUNLOCK

3

```
1      0001 0 MODULE FORUNLOCK (
2          0 IDENT = '1-002'
3          0 ) =
4      0004 1 BEGIN
5
6      0006 1 ****
7      0007 1 *
8      0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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10     0010 1 * ALL RIGHTS RESERVED.
11
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24     0024 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
25
26     0026 1 *
27
28     0028 1 ****
29
30     0029 1 ++
31     0031 1 FACILITY: FORTRAN Support Library - User Callable
32
33     0033 1 ABSTRACT:
34
35     0035 1 This module implements the FORTRAN UNLOCK statement.
36
37     0037 1 ENVIRONMENT: User access mode; mixture of AST level or not.
38
39     0039 1 AUTHOR: Steven B. Lionel, CREATION DATE: 17-May-1979
40
41     0041 1 MODIFIED BY:
42
43     0043 1 1-001 - Original. SBL 17-May-1979
44     0044 1 1-002 - Move the BUILTIN ACTUALCOUNT into the routine, since the next
45     0045 1 BLISS compiler will require it to be there. While we are here,
46     0046 1 clean up the source text a little. Note that this edit does not
47     0047 1 change the code. JBS 22-Aug-1980
48
49     0049 1 --
50     0050 1 !<BLF/PAGE>
```

```
52      0051 1 | SWITCHES:  
53      0052 1 |  
54      0053 1 |  
55      0054 1 |  
56      0055 1 | SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);  
57      0056 1 |  
58      0057 1 |  
59      0058 1 | LINKAGES:  
60      0059 1 |  
61      0060 1 |  
62      0061 1 | REQUIRE 'RTLIN:OTSLNK';           ! define all linkages  
63      0490 1 |  
64      0491 1 |  
65      0492 1 | TABLE OF CONTENTS:  
66      0493 1 |  
67      0494 1 |  
68      0495 1 | FORWARD ROUTINE  
69      0496 1 |   FOR$UNLOCK;                  ! FORTRAN UNLOCK statement  
70      0497 1 |  
71      0498 1 |  
72      0499 1 | INCLUDE FILES:  
73      0500 1 |  
74      0501 1 |  
75      0502 1 | LIBRARY 'RTLSTARLE';          ! System symbols  
76      0503 1 |  
77      0504 1 | REQUIRE 'RTLML:FORERR';        ! FORTRAN error number definitions  
78      0572 1 |  
79      0573 1 | REQUIRE 'RTLML:FORPAR';        ! Inter-module constants  
80      0596 1 |  
81      0597 1 | REQUIRE 'RTLIN:RTLPSECT';       ! Define DECLARE_PSECTS macro  
82      0692 1 |  
83      0693 1 | REQUIRE 'RTLML:OTSLUB';         ! Get LUB offsets  
84      0833 1 |  
85      0834 1 |  
86      0835 1 | MACROS:  
87      0836 1 |  
88      0837 1 |   NONE  
89      0838 1 |  
90      0839 1 | EQUATED SYMBOLS:  
91      0840 1 |  
92      0841 1 |   NONE  
93      0842 1 |  
94      0843 1 | OWN STORAGE:  
95      0844 1 |  
96      0845 1 |   NONE  
97      0846 1 |  
98      0847 1 | EXTERNAL REFERENCES:  
99      0848 1 |  
100     0849 1 |  
101     0850 1 | EXTERNAL ROUTINE  
102     0851 1 |   FOR$SIOSTAT_HND,           ! Error handler  
103     0852 1 |   FOR$$SIGNAL_STO : NOVALUE,    convert error code and signal  
104     0853 1 |   FOR$SCB_PUSH : JSB_CB_PUSH NOVALUE, ! Get a control block  
105     0854 1 |   FOR$SCB_POP : JSB_CB_POP NOVALUE; ! Return a control block  
106     0855 1 |  
107     0856 1 |  
108     0857 1 | ! PSECT DECLARATIONS:
```

FOR\$UNLOCK
1-002

M 3
16-Sep-1984 00:56:44 VAX-11 Bliss-32 V4.0-742
14-Sep-1984 12:32:59 [FORRTL.SRC]FORUNLOCK.B32;1

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(2)

: 109 0858 1 !
: 110 0859 1 DECLARE_PSECTS (FOR);
: 111 0860 1

! Declare PSECTS for FOR\$ facility

```
113      0861 1 GLOBAL ROUTINE FORUNLOCK (UNIT, ERR_EQL) =  
114      0862 1  
115      0863 1 ++  
116      0864 1 FUNCTIONAL DESCRIPTION:  
117      0865 1  
118      0866 1 Call CB PUSH to get a control block for this UNIT.  
119      0867 1 Do an RMS $FREE on the unit.  
120      0868 1 Return I/O system to previous state.  
121      0869 1  
122      0870 1 FORMAL PARAMETERS:  
123      0871 1  
124      0872 1     UNIT.rlu.v          Unit number (call by value)  
125      0873 1     ERR_EQL.rl.v       If 1, return IOSTAT value  
126      0874 1           If omitted or zero, signal all errors  
127      0875 1  
128      0876 1 IMPLICIT INPUTS:  
129      0877 1  
130      0878 1     LUB$V_OPENED        1 if file previously opened  
131      0879 1     LUB$V_NOTSEQORG    1 if file not sequential organization  
132      0880 1  
133      0881 1 IMPLICIT OUTPUTS:  
134      0882 1  
135      0883 1  
136      0884 1 ROUTINE VALUE:  
137      0885 1  
138      0886 1     An IOSTAT value.  
139      0887 1  
140      0888 1 SIDE EFFECTS:  
141      0889 1  
142      0890 1     All locked records on the unit are unlocked. If the unit is  
143      0891 1     not open, or is not relative or indexed organization, the error  
144      0892 1     FOR$UNLERR - UNLOCK error  
145      0893 1     is signalled.  
146      0894 1  
147      0895 1 --  
148      0896 1  
149      0897 2 BEGIN  
150      0898 2  
151      0899 2 GLOBAL REGISTER  
152      0900 2     CCB = K_CCB_REG : REF BLOCK [, BYTE];  
153      0901 2  
154      0902 2 BUILTIN  
155      0903 2     ACTUALCOUNT;  
156      0904 2  
157      0905 2 LOCAL  
158      0906 2     L_UNWIND_ACTION : VOLATILE,  
159      0907 2     L_ERR_EQL_PRES : VOLATILE,  
160      0908 2     STATUS;  
161      0909 2  
162      0910 2 ENABLE  
163      0911 2     FOR$IOSTAT_HND (L_UNWIND_ACTION, L_ERR_EQL_PRES);  
164      0912 2  
165      0913 2 + Set up unwind action and flag if ERR= or IOSTAT was present.  
166      0914 2 -  
167      0915 2  
168      0916 2     L_UNWIND_ACTION = FOR$K_UNWINDNOP;  
169      0917 2
```

```
170      0918 2   IF (ACTUALCOUNT () GTR 1) THEN L_ERR_EQL_PRES = .ERR_EQL ELSE L_ERR_EQL_PRES = 0;
171      0919 2
172      0920 2
173      0921 2   + Get a LUB for this unit.
174      0922 2   - On return, CCB points to the current control block.
175      0923 2
176      0924 2   - FOR$SCB_PUSH (.UNIT, LUB$K_LUN_MIN);
177      0925 2
178      0926 2   + Error action is now to pop the LUB.
179      0927 2   - L_UNWIND_ACTION = FOR$K_UNWINDPOP;
180      0928 2
181      0929 2
182      0930 2   + If the file is not open, or is not relative or indexed organization,
183      0931 2   - signal error FOR$K_UNLERR.
184      0932 2
185      0933 2
186      0934 2   IF (( NOT .CCB [LUB$V_OPENED]) OR ( NOT .CCB [LUB$V_NOTSEQORG])) THEN FOR$$SIGNAL_STO (FOR$K_UNLERR);
187      0935 2
188      0936 2   + Now unlock the file. Signal errors except for RMSS_RNL which we
189      0937 2   choose to ignore (no records were locked).
190      0938 2
191      0939 2
192      0940 2
193      0941 3   IF ( NOT $FREE (RAB = .CCB))
194      0942 2   THEN
195      0943 3     BEGIN
196      0944 3
197      0945 3     WHILE (.CCB [RAB$L_STS] EQL RMSS_RSA) DO
198      0946 4       BEGIN
199      0947 4       $WAIT (RAB = .CCB);
200      0948 5       $FREE (RAB = .CCB)
201      0949 3       END;
202      0950 3
203      0951 4   IF (( NOT .CCB [RAB$L_STS]) AND (.CCB [RAB$L_STS] NEQU RMSS_RNL)) !
204      0952 3   THEN
205      0953 3     FOR$$SIGNAL_STO (FOR$K_UNLERR);
206      0954 3
207      0955 2   END;
208      0956 2
209      0957 2
210      0958 2   + Return the I/O system to its last state.
211      0959 2   - FOR$SCB_POP ();
212      0960 2
213      0961 2
214      0962 2   + Return a success IOSTAT code
215      0963 2   - RETURN 0;
216      0964 2
217      0965 1   END;
```

! of routine FOR\$UNLOCK

```
.TITLE FOR$UNLOCK
.IDENT \1-002\

.EXTRN FOR$SIOSTAT_HND
.EXTRN FOR$$SIGNAL_STO
.EXTRN FOR$SCB_PUSH, FOR$SCB_POP
.EXTRN SY$FREE, SY$SWAIT
```

				.PSECT _FOR\$CODE,NOWRT, SHR, PIC,2	
				.ENTRY FOR\$UNLOCK, Save R2,R3,R4,R11	: 0861
				MOVAB SYSSFREE, R4	
				MOVAB FOR\$SIG\$IGNAL_STO, R3	
				SUBL2 #4, SP	
				CLRL L_ERR_EQL_PRES	: 0897
				CLRL L_UNWIND_ACTION	
				MOVAL 8\$, (FP)	
				MOVL #1, L_UNWIND_ACTION	: 0916
				CMPB (AP), #1	: 0918
				BLEQU 1\$	
				MOVL ERR_EQL, L_ERR_EQL_PRES	
				BRB 2\$	
				CLRL L_ERR_EQL_PRES	
				CLRL R0	: 0924
				MOVL UNIT, R2	
				JSB FOR\$SCB_PUSH	
				CLRL L_UNWIND_ACTION	: 0928
				BLBC -4(CCB), -3\$: 0934
				BBS #3, -95(CCB), 4\$	
				PUSHL #56	
				CALLS #1, FOR\$SIG\$IGNAL_STO	
				PUSHL CCB	: 0941
				CALLS #1, SYSSFREE	
				BLBS R0, 7\$	
				CMPL 8(CCB), #99034	: 0945
				BNEQ 6\$	
				PUSHL CCB	: 0947
				CALLS #1, SYSSWAIT	
				PUSHL CCB	: 0948
				CALLS #1, SYSSFREE	
				BRB 5\$	
				BLBS 8(CCB), 7\$: 0951
				CMPL 8(CCB), #98720	
				BEQL 7\$	
				PUSHL #56	: 0953
				CALLS #1, FOR\$SIG\$IGNAL_STO	
				JSB FOR\$SCB_POP	: 0960
				CLRL R0	: 0964
				RET	: 0965
				.WORD Save nothing	: 0897
				MOVL 8(AP), R0	
				MOVL 4(R0), R0	
				PUSHAB L_ERR_EQL_PRES	
				PUSHAB L_UNWIND_ACTION	
				PUSHL #2	
				PUSHL SP	
				MOVQ 4(AP), -(SP)	
				CALLS #3, FOR\$SIOSTAT_HND	
				RET	

; Routine Size: 169 bytes, Routine Base: _FOR\$CODE + 0000

; 218 0966 1

FOR\$UNLOCK
1-002

D 4
16-Sep-1984 00:56:44 VAX-11 Bliss-32 V4.0-742
14-Sep-1984 12:32:59 [FORRTL.SRC]FORUNLOCK.B32:1

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: 219 0967 1 END
: 220 0968 1
: 221 0969 0 ELUDOM

! of module FOR\$UNLOCK

PSECT SUMMARY

Name	Bytes	Attributes
_FOR\$CODE	169	NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

Library Statistics

File	Total	Symbols	Pages	Processing
	Loaded	Percent	Mapped	Time
\$_\$255\$DUA2B:[SYSLIB]STARLET.L32:1	9776	8	0	00:01.0

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS\$:FORUNLOCK/OBJ=OBJ\$:FORUNLOCK MSRC\$:FORUNLOCK/UPDATE=(ENH\$:FORUNLOCK)

Size: 169 code + 0 data bytes
Run Time: 00:09.0
Elapsed Time: 00:29.9
Lines/CPU Min: 6460
Lexemes/CPU-Min: 35280
Memory Used: 110 pages
Compilation Complete

0185 AH-BT13A-SE
VAX/VMS V4.0

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